שם: יוסף שטיין, ת.ז:206128613

For every variable that we need to sum we separate all the sum variables into separate lists. For example {Summing:B,P(B),Summing:E,P(E),Summing:A,P(A|B,E),P(J|A),P(M|A). We separate them into lists of list {{Summing:B,P(B)},{Summing:E,P(E),{Summing:A,P(A|B,E),P(J|A),P(M|A)}} So for every place there is Summing:<variable name> we separate until the next summing string into a new list, And for any separate list in the length of at least of a 3 we order the factor tables such that in the end of the List there is the smallest factor tables and when we doing join we done it on the smallest factor tables that this list had.

factorList - String list of factors such that determine the order of tables. factorTables - CPT list of factors that we in this function order them such that give us the minimal multiplication operation.

The best order of factors tables that reduce the number of multiplications.